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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,577	07/02/2003	Matthew Brady Henson	SIG000098	3476
34399	7590	06/30/2006	EXAMINER	
GARLICK HARRISON & MARKISON			TAT, BINH C	
P.O. BOX 160727			ART UNIT	
AUSTIN, TX 78716-0727			PAPER NUMBER	
			2825	

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Period for Reply

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This office action is in response to application 10/612577 filed on 07/02/03.

Claims 1-46 remain pending in the application.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by May et al. (U.S.

PUB No. 20040104707).

3. As to claims 1, 17 and 29, May et al. teach A battery-optimized system-on-a-chip comprises: multimedia module operably coupled to produce rendered output data (see fig 1 element 24 multimedia module); high-speed interface (see fig 1 element 18); processing module (see fig 1 element 20); on-chip memory operably coupled to store at least a portion of a multimedia application, wherein the processing module processes input multimedia data in accordance with the at least the portion of the multimedia application to produce output multimedia data, wherein the input multimedia data is received from at least one of the multimedia module and the high-speed interface, and wherein the output multimedia data is provided to at least one of the multimedia module and the high-speed interface (see fig 1, fig 2, fig 3 paragraph 0022-0041) ; and on-chip DC-to-DC converter operably coupled to convert a battery voltage into a supply voltage, wherein the DC-to-DC converter provides the supply

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voltage to at least one of the multimedia module, the high-speed interface, the processing module, and the on-chip memory (see fig 1 element 26 and element 22 paragraph 0022-0031).

4. As to claim 2, 18, and 30, May et al. teach wherein the on-chip memory is further operably coupled to provide at least a portion of the input multimedia data and is further operably coupled to receive at least a portion of the output multimedia data (see fig 1 paragraph 0023-0026).

5. As to claim 3, 20, and 31 May et al. teach further comprises: a memory interface operably coupled to provide at least a portion of the output multimedia data to external memory, and to receive at least a portion of the input multimedia data from the external memory (see fig 1, fig 2 paragraph 0030-0033).

6. As to claim 5, 19, and 33, May et al. teach the battery-optimized system on-a-chip of claim 1 further comprises a plurality of processing modules operably coupled to perform a plurality of multimedia applications, wherein the plurality of processing modules includes the processing module (see fig 1 paragraph 0025-0028).

7. As to claim 6, 22, and 34 May et al. teach further comprises a plurality of high speed interfaces operably coupled to provide a pluralit of input multimedia data to the processing module from a plurality of external sources and to provide a plurality of output multimedia data to the plurality of external sources, wherein the plurality of high-speed interfaces includes the high-speed interface, the plurality of input multimedia data includes the input multimedia data, and the plurality of output multimedia data includes the output multimedia data (see fig 1 fig 2 paragraph 0027-0036).

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8. As to claim 7, 23, and 35 May et al. teach wherein each of the plurality of external sources comprises at least one of a host computer, a video decoder, memory card, removable memory drive, a wireless modem, and a CMOS/CCD image sensor (see fig 1 fig 2 paragraph 0027-0036).

9. As to claim 8, 24, and 36 May et al. teach wherein each of the input and output multimedia data further comprises at least one of digital audio, analog audio, digital video, analog video, text, and video graphics (see fig 1).

10. As to claim 9, and 37 May et al. teach further comprises a battery charger operably coupled to charge a battery that provides the battery voltage when an external power source is coupled to the battery-optimized system-on-a-chip (see fig 1, fig 2 paragraph 0030-0033).

11. As to claim 10, and 38 May et al. teach wherein the high-speed interface further comprises a universal serial bus compliant interface (see fig 1).

12. As to claim 14, 28, and 42 May et al. teach wherein the DC-to-DC converter is further coupled to provide the supply voltage off-chip (see fig 1 element 26).

13. As to claim 15 and, 43 May et al. teach wherein the on-chip memory further comprises at least one of flash memory, read only memory, and random access memory (see fig 1 paragraph 0025-0030).

14. As to claim 16, and 44 May et al. teach wherein the multimedia module further functions to provide the rendered output data to at least one of: headphones, a speaker, and a video graphics display, and wherein the multimedia module further functions to receive input signals from at least one of: a keypad, a keyboard, an image capture device, and a microphone, wherein

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the multimedia module processes the input signals to produce the input multimedia data (see fig 1 fig 2 paragraph 0027-0036).

15. As to claim 45, May et al. teach herein the display further comprises at least one of a headphone jack, a speaker, and a video graphics display (see fig 1 paragraph 0025-0030).

16. As to claim 46, May et al. teach comprises an input device operably coupled to the multimedia module, wherein the input device includes at least one of: a microphone, a keypad, a keyboard, and an image capture device (see fig 1 paragraph 0025-0030 and background).

***Allowable Subject Matter***

Claims 4, 21, 11-13, 25-27, 32, and 39-41 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (571) 272-1908. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on (571) 272-7483. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Binh Tat  
Art Unit 2825  
June 22, 2006



THUAN DO

Primary examiner

6/23/06